

Amendments to the Claims

Claim 1. (Currently amended) 1. A bypass valve, for use with a heat exchanger of the type having including a plurality of ~~parallel~~ tubular members having adjacent spaced-apart wall portions defining flow openings in the wall portions ~~communication to form flow manifolds,~~ the bypass valve comprising:
a housing having a hollow plug portion with opposed plug walls defining inlet and outlet openings in said plug walls ~~therein,~~
the plug walls being adapted to be sealingly mounted between selected heat exchanger spaced-apart adjacent tubular member wall portions to allow fluid flow ~~respectively between said flow manifolds and said bypass valve~~ inlet and outlet openings and respective flow openings in the wall portions;
the bypass valve housing also having an actuator portion located adjacent to the plug portion; and
an actuator releasably mounted in the actuator portion and having a reciprocating plunger extending into the plug portion to block and unblock flow between said inlet and outlet openings.

Claim 2. (Original) A bypass valve as claimed in claim 1 wherein the actuator is a temperature responsive actuator having a central shaft mounted in the housing actuator portion and a reciprocating barrel portion forming said plunger.

Claim 3. (Original) A bypass valve as claimed in claim 2 wherein the actuator is a thermal motor adapted to extend axially upon being heated to a predetermined temperature and to retract upon being cooled below said temperature.

Claim 4. (Currently amended) A bypass valve as claimed in claim 2 wherein the housing actuator portion includes a removable closure located remote from the plug portion, the actuator central shaft being attached to the removable closure.

Sub
Δ,
Claim 5. (Original) A bypass valve as claimed in claim 3 or 4 and further comprising bias means located in the housing for urging the actuator to retract and the plunger to unblock the flow through the bypass valve.

Claim 6. (Original) A bypass valve as claimed in claim 1 wherein the housing plug portion opposed plug walls are flat, parallel side walls defining said inlet and outlet openings.

Claim 7. (Cancelled)

Claim 8. - 13. (Withdrawn)

C
Claim 14. (Currently amended) A heat exchanger comprising:
a plurality of ~~parallel~~ tubular members having adjacent spaced-apart wall portions defining flow openings in ~~communication to form inlet and outlet manifolds~~ the wall portions for the flow of fluid through the tubular members;
a bypass valve including a housing having a hollow plug portion with opposed plug walls defining inlet and outlet openings in said plug walls; therein,
the plug walls being sealingly mounted between selected spaced-apart adjacent tubular member wall portions to allow fluid flow ~~respectively~~ between said ~~flow manifolds and said~~ bypass valve inlet and outlet openings and respective flow openings in the wall portions;
the bypass valve housing also having an actuator portion located adjacent to the plug portion;
and
an actuator releasably mounted in the actuator portion and having a reciprocating plunger extending into the plug portion to block and unblock flow between said inlet and outlet openings.

Claim 15. (Currently amended) A heat exchanger as claimed in claim 14 wherein the tubular members are formed of plate pairs having enlarged distal end portions joined together to form ~~said inlet and outlet manifolds,~~ the distal end portions of a selected plate pair in each manifold

5/25/14
C1
defining said spaced-apart wall portions with flow openings, said plug walls being spaced-
apart flat, parallel side walls defining said inlet and outlet openings and being joined
respectively to said selected plate pair spaced-apart wall portions, so that fluid can flow
between the inlet and outlet manifolds when the flow through the bypass valve is unblocked
adjacent enlarged distal end portions of the adjacent plate pairs.

Claim 16. (Cancelled)

Claim 17. (Original) A heat exchanger as claimed in claim 14 wherein the actuator is a temperature responsive actuator having a central shaft mounted in the housing actuator portion and a reciprocating barrel portion forming said plunger.

Claim 18₂. (Currently amended) A heat exchanger as claimed in claim 17 wherein the actuator is a thermal motor adapted to extend axially upon being heated to a predetermined temperature and to retract upon being cooled below said temperature.

Claim 19. (Withdrawn)

Claim 20. (Withdrawn)